

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/06/03

Date Received: 02/13/03

Project: Metro Self Monitor, PO#M69442, F&BI 302097

Date Extracted: 02/25/03

Date Analyzed: 02/26/03

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

| <u>Sample ID</u><br>Laboratory ID | <u>Chromium</u> | <u>Copper</u> | <u>Nickel</u> | <u>Zinc</u> |
|-----------------------------------|-----------------|---------------|---------------|-------------|
| M69442<br>302097-01               | 0.76            | 0.95          | 0.91          | 0.13        |
| Method Blank                      | <0.05           | <0.05         | <0.05         | <0.05       |

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Project: Metro Self Monitor, PO#M69442, F&BI 302097

**QUALITY ASSURANCE RESULTS  
FROM TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 302048-01 (Duplicate)

| Analyte  | Reporting Units | Sample Result | Duplicate Result | Relative Percent Difference | Acceptance Criteria |
|----------|-----------------|---------------|------------------|-----------------------------|---------------------|
| Chromium | mg/L (ppm)      | 0.41          | 0.46             | 11                          | 0-20                |
| Copper   | mg/L (ppm)      | 0.36          | 0.34             | 6                           | 0-20                |
| Nickel   | mg/L (ppm)      | 0.34          | 0.32             | 6                           | 0-20                |
| Zinc     | mg/L (ppm)      | 0.13          | 0.21             | a                           | 0-20                |

Laboratory Code: 302048-01 (Matrix Spike)

| Analyte  | Reporting Units | Spike Level | Sample Result | % Recovery MS | Acceptance Criteria |
|----------|-----------------|-------------|---------------|---------------|---------------------|
| Chromium | mg/L (ppm)      | 2           | 0.41          | 94            | 80-120              |
| Copper   | mg/L (ppm)      | 2           | 0.36          | 96            | 80-120              |
| Nickel   | mg/L (ppm)      | 4           | 0.34          | 93            | 80-120              |
| Zinc     | mg/L (ppm)      | 2           | 0.13          | 92            | 80-120              |

Laboratory Code: Laboratory Control Sample

| Analyte  | Reporting Units | Spike Level | % Recovery LCS | % Recovery LCSD | Acceptance Criteria | RPD (Limit 20) |
|----------|-----------------|-------------|----------------|-----------------|---------------------|----------------|
| Chromium | mg/L (ppm)      | 2           | 99             | 100             | 80-120              | 1              |
| Copper   | mg/L (ppm)      | 2           | 100            | 101             | 80-120              | 1              |
| Nickel   | mg/L (ppm)      | 4           | 98             | 99              | 80-120              | 1              |
| Zinc     | mg/L (ppm)      | 2           | 100            | 102             | 80-120              | 2              |

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

March 6, 2003

INVOICE #03ACU0306-2

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO#M69442, F&BI 302097 - Results of testing  
requested by Gerry Thompson for material submitted on February 13, 2003.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc  
by Method 6010B @ \$80 per sample \$ 80.00

Amount Due ..... \$ 80.00

FEDERAL TAX ID #(b) (6)

302097

## SAMPLE CHAIN OF CUSTODY

ME 02113103 BI<sub>2</sub>

Send Report To G. Thompson  
 Company ALASKAN Copper works  
 Address 628 S. Henderson St  
 City, State, ZIP Seattle WA 98134  
 Phone # 206-382-8779 Fax # 206-382-4309

|   |                       |
|---|-----------------------|
| SAMPLERS (signature) <u>[Signature]</u>       |                       |
| PROJECT NAME/NO.<br><u>METRO Self Monitor</u> | PO #<br><u>M69442</u> |
| REMARKS                                       |                       |

Page # \_\_\_\_\_ of \_\_\_\_\_

## TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by: \_\_\_\_\_

## SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

| Sample ID | Lab ID | Date    | Time  | Sample Type | # of<br>containers | ANALYSES REQUESTED |              |               |              |               |     |  |           |  |  | Notes |  |  |
|-----------|--------|---------|-------|-------------|--------------------|--------------------|--------------|---------------|--------------|---------------|-----|--|-----------|--|--|-------|--|--|
|           |        |         |       |             |                    | TPH-Diesel         | TPH-Gasoline | BTEX by 8021B | VOCs by 8260 | SVOCs by 8270 | HFS |  |           |  |  |       |  |  |
| M69442    | 01     | 2/13/03 | 12:30 | H2O         | 1                  |                    |              |               |              |               |     |  | only n52w |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |
|           |        |         |       |             |                    |                    |              |               |              |               |     |  |           |  |  |       |  |  |

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

| SIGNATURE                            | PRINT NAME              | COMPANY    | DATE            | TIME         |
|--------------------------------------|-------------------------|------------|-----------------|--------------|
| Relinquished by: <u>[Signature]</u>  | <u>G. Thompson</u>      | <u>ACW</u> | <u>2/13/03</u>  | <u>1:24</u>  |
| Received by: <u>Tara E. Deltruff</u> | <u>Tara E. Deltruff</u> | <u>FBI</u> | <u>02/13/02</u> | <u>1:35p</u> |
| Relinquished by:                     |                         |            |                 |              |
| Received by:                         |                         |            |                 |              |



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March 6, 2003

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

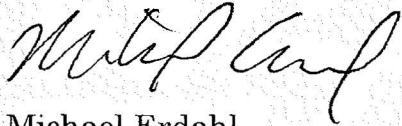
Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 13, 2003 from the Metro Self Monitor, PO#M69442, F&BI 302097 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU0306R.DOC